Rental Property Management

property_type

PK	id varchar(10)
	name varchar(10) not null unique

user

PK	id varchar(10)
	username varchar(25) unique not null
	password varchar(10) not null
	email varchar(25) not null unique
	phone varchar(10) not null unique
	role varchar(20) check (role = 'admin' or role = 'customer' or role = 'host')

property

PK	id varchar(10)
	price double not null
	description varchar(50)
	number_guest int default (1) not null
	location varchar(50) not null
	id_property_type varchar(10) not null
	foreign key (id_property_type) references property_ty
	id_userid varchar(10) not null
	foreign key (id_userid) references user (id)

reservation

PK	id varchar(10)
	date_from datetime not null
	date_to datetime not null
	days int not null
	total_price double not null
	id_property varchar(10) not null
	foreign key (id_property) references property (id)
	id_userid varchar(10) not null
	foreign key (id_userid) references user (id)

reviews

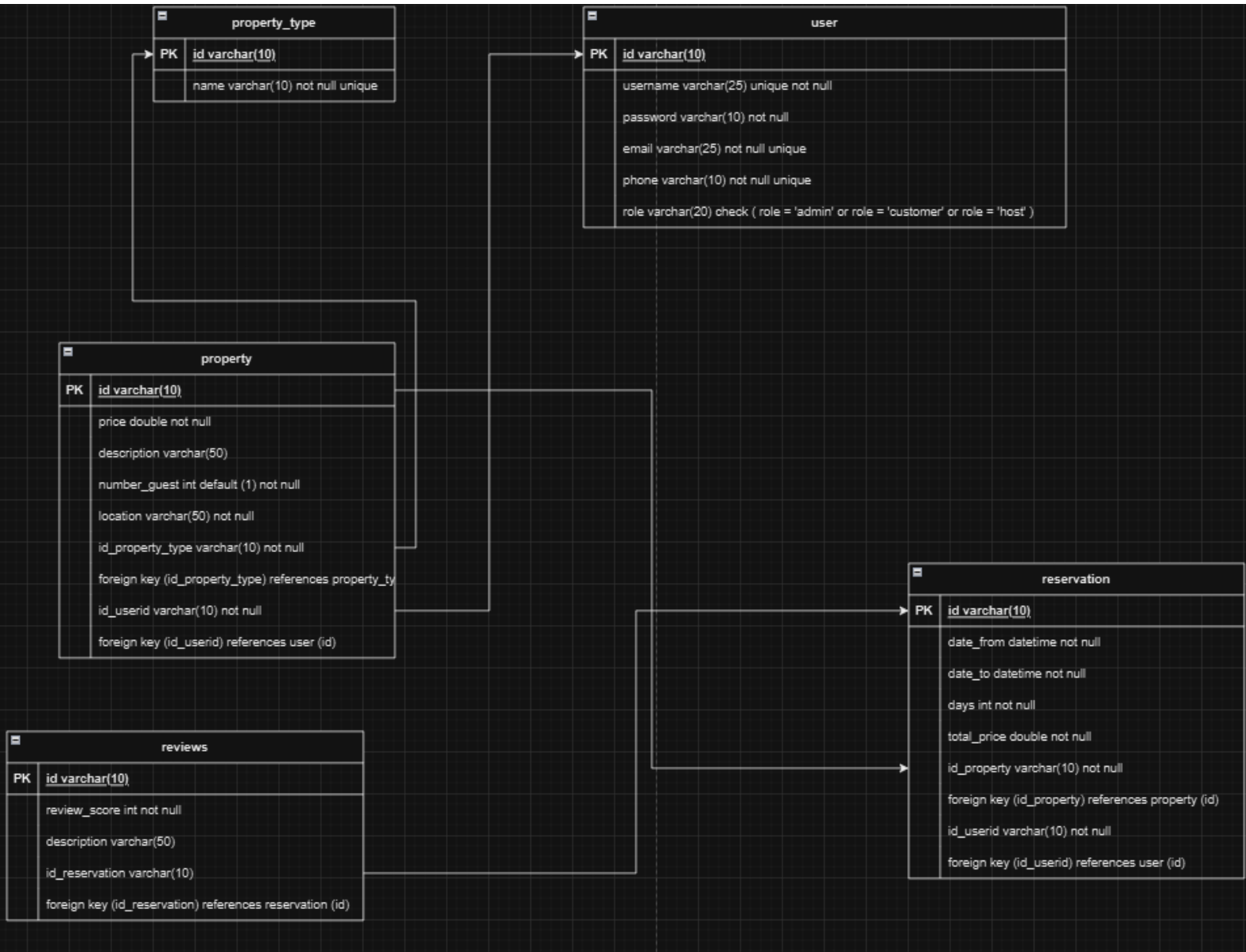|	
PK	id varchar(10)
	review_score int not null
	description varchar(50)
	id_reservation varchar(10)
	foreign key (id_reservation) references reservation (id)

Table Explanations:

1. **user Table**
   - Stores user information with roles such as admin, customer, or host.
   - Contains fields for user identification, login credentials, contact information, and role validation.
2. **property_type Table**
   - Stores types of properties example (Hotel, house).
   - Ensures each property type is uniquely identified by id and name.

3. **`property` Table**
   o Stores property details including price, description, guest capacity, and location.
   o Links to the `property_type` table to categorize properties and to the `user` table to associate a property with its owner.
4. **`reservation` Table**
   o Tracks booking information, including start and end dates, total price, and duration.
   o Links to the `property` table for reserved properties and the `user` table for customers.
5. **`reviews` Table**
   o Collects feedback on reservations, including a review score and optional description.
   o Links to the `reservation` table to associate reviews with specific bookings.

```sql
CREATE DATABASE property_rental_management;


create table user (
    id varchar(10) primary key ,
    username varchar(25) unique  not null ,
    password varchar(10) not null ,
    email varchar(40) not null unique ,
    phone varchar(10) not null unique ,
    role varchar(20) check ( role = 'admin' or role = 'customer' or role =
'host' )
);

create table property_type(
    id varchar(10) primary key ,
    name varchar(10) not null unique
);

create table property(
    id varchar(10) primary key ,
    price double not null ,
    description varchar(50) ,
    number_guest int default (1) not null ,
    location varchar(50) not null,
    id_property_type varchar(10) not null ,
    foreign key (id_property_type) references property_type (id),
    id_userid varchar(10) not null ,
    foreign key (id_userid) references user (id)
);


create table reservation (
    id varchar(10) primary key ,
    date_from datetime not null ,
    date_to datetime not null ,
```

```sql
    days  int not null ,
    total_price double not null,
    id_property varchar(10) not null ,
    foreign key (id_property) references property (id),
    id_userid varchar(10) not null ,
    foreign key (id_userid) references user (id)
);

create table reviews(
    id varchar(10) primary key ,
    review_score int not null ,
    description varchar(50),
    id_reservation varchar(10),
    foreign key (id_reservation) references reservation (id)
);


insert user values
('1','Basil','123456','Basil@basil.com','051111111','host');
insert user values
('2','Mohammed','123456','Mohammed@Mohammed.com','05112311','customer');
insert user values
('3','Sami','123456','Sami@Sami.com','05355156','customer');
insert user values
('4','Abdulrahman','123456','Abdulrahman@Abdulrahman.com','05112145','custome
r');


insert property_type values ('1','House');
insert property_type values ('2','Hotel');
insert property_type values ('3','Chalet');
insert property_type values ('4','Cabin');




insert property values('1', 1000 , 'House in Riyadh',11,'Riyadh','1','1');
insert property values('2', 500 , 'Hotel in Riyadh',11,'Riyadh','2','1');
insert property values('3', 2000 , 'Chalet in Riyadh',11,'Riyadh','3','1');


insert reservation values ('1', cast('2024-01-01' as datetime )  ,cast('2024-
01-25'as datetime ) , 25,25000,'1' , '2');
insert reservation values ('2', cast('2024-01-26' as datetime ) ,cast('2024-
02-05' as datetime ) , 11,5500,'2' , '3');
insert reservation values ('3', cast('2024-02-06' as datetime ) ,cast('2024-
02-10' as datetime ) , 5,10000,'3' , '4');

insert reviews values ('1',4,'good place , nice view ',1);
insert reviews values ('2',5,'good place , nice view ',2);
insert reviews values ('3',3,'good place , nice view ',3);

select * from user;
select * from property_type;
select
    property.*,
    property_type.name property_type_name,
    user.username
```

```sql
from property
left outer join property_type on property_type.id = property.id_property_type
left outer join user on user.id = property.id_userid;

select
    reservation.*,
    property.description property_description,
    user.username
from reservation
left outer join property on property.id = reservation.id_property
left outer join user on user.id = reservation.id_userid;

select * from reviews;
```